

WE CLAIM:

1. A real-time video radiation exposure monitoring system, comprising:
a radiation detector;
a video camera;
a radio modem having a transmitter and receiver, said transmitter having an input connected to said radiation detector; and
a computer coupled to said receiver and said video camera and programmed to display video images from said camera simultaneously with data from said radiation detector.
2. The system of claim 1, further comprising a video interface having a separate housing and connected between said video camera and said computer.
3. A real-time video radiation exposure monitoring system, comprising:
a Geiger-Müller tube;
an A/D converter having an input connected to said Geiger-Müller tube;
a computer;
wireless transmitting means connected to said A/D converter for transmitting digital data to said computer; and
a video camera linked to said computer,
wherein said computer is programmed to display video images from said camera simultaneously with data from said Geiger-Müller tube.
4. The system of claim 3, further comprising a variable-sensitivity meter circuit connected between said Geiger-Müller tube and said A/D converter, and means for encoding the sensitivity setting of said meter circuit and supplying the encoded sensitivity setting to said wireless transmitting means.
5. The system of claim 3, further comprising means connected between said video camera and said computer for capturing video images from said video camera.

6. The system of claim 3, further comprising a RISC microcontroller connected between said Geiger-Müller tube and said wireless transmitting means data, wherein said A/D converter is contained in said RISC microcontroller.
7. The system of claim 3, wherein said wireless transmitting means includes a radio modem.
8. A method of assessing radiation exposure, comprising:
measuring radiation in an area of a workplace with a Geiger-Müller meter;
obtaining video images of said area as said measuring step is performed;
supplying radiation data from said Geiger-Müller meter to a computer;
supplying said video images to said computer;
processing said radiation data and video images in said computer; and
displaying said radiation data and video images simultaneously on a display screen.
9. The method of claim 8, further comprising:
converting radiation readings from said Geiger-Müller meter to digital data; and
transmitting said digital data to said computer over a wireless link.
10. The method of claim 9, further comprising the step of detecting the sensitivity level of said Geiger-Müller meter and supplying said sensitivity level to computer over said wireless link.
11. The method of claim 10, wherein said Geiger-Müller meter has an analog electronic circuit, further comprising the step of adapting said Geiger-Müller meter for digital output by connecting a RISC microcontroller with an internal A/D converter to an output of said analog electronic circuit.